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10/574,299

03/22/2007

Wilfried Blocken

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MCCARTER & ENGLISH LLP  
CITYPLACE I  
185 ASYLUM STREET  
HARTFORD, CT 06103

EXAMINER

WENDELL, MARK R

ART UNIT

PAPER NUMBER

3635

MAIL DATE

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11/20/2008

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,299	<b>Applicant(s)</b> BLOCKEN, WILFRIED	
	<b>Examiner</b> MARK R. WENDELL	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-5, 7, 9-10, 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Blocken (US 5904763). Regarding claim 1, Blocken illustrates in Figures 1 and 2 and describes in the specification (claims 1-5 and 14, Column 1, lines 6-58 and column 2, lines 34-53)a building material comprising:

- An outside face;
- An inside face;
- A three-layered structure having an outer layer (30, 34), inner layer (20), and middle layer (24) made from insulating mortar with high thermal performance that has at least 70 volume percent of recycled, granular polyurethane and cement.

The examiner notes that the outer layer (30) in Figure 1 does not directly touch the mortar layer (24), rather insulation (28) does; however column 2, lines 48-49 state that the insulation may be removed.

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Regarding claim 2, Blocken illustrates in Figures 1 or 2 the width of the middle layer (24) greater than the width of the outer layer (34, 30) and greater than the width of the inner layer (20).

Regarding claim 3, Blocken illustrates in Figures 1 or 2 the width of the outer layer (34, 30) being thinner than the width of the inner layer (20).

Regarding claim 4, Blocken illustrates in Figure 1, the outer layer (30) being made from concrete.

Regarding claim 5, Blocken teaches in Claims 4 and 6 of the prior art the middle layer comprising 90-94 volume percent of recycled polyurethane that is ground into a powder and granule mixture with particle size of less than 8mm and 6-10 volume percent of cement.

Regarding claim 7, Blocken illustrates in Figures 1 and 2 the middle layer (24) having a pore structure (26).

Regarding claims 9-10, Blocken teaches in Columns 2 and 3 that all surfaces within the structure are level.

Regarding claim 13, Blocken does not teach or illustrate gaps in the inner or outer layers.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 11-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763). It is described above what is disclosed by Blocken; however the reference never distinctly discloses the exact thickness or length of individual layers. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the outer layer have a thickness between 4 and 15 cm and have an overall length of 0.4 to 2.5 m, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art (In re Aller, 105 USPQ 233).

Regarding claim 12, Blocken illustrates a strip-shaped insulation, which is well known to be a rubber-like material since it dampens noise from foot traffic, (28) between layers of the block, however not between two blocks. It would have been obvious to one having ordinary skill in the art at the time of invention to include the insulating strip between two blocks to decrease the amount of transferred noise.

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Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763) in view of Maguire et al. (US 6082933). It is described above what is disclosed by Blocken; however the reference fails to teach a projection and corresponding recess. Maguire illustrates in Figure 3 a concrete block with corresponding projections and recesses. It would have been obvious to one having ordinary skill in the art at the time of invention to make the block apparatus of Blocken in the shape of the block of Maguire in order to be able to stack multiple blocks or layers of blocks together to build a larger, more stable structure.

Claims 14-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blocken (US 5904763) in view of Mandish (US 5724783). It is described above what is disclosed by Blocken; however the reference fails to include the lamination of the additional outer layer and the inner layer, and (ii) the mean layer thickness is reduced by at least 0.5% during the process. The lamination of additional layers onto a mortar comprising cement and reprocessed polymer resin and also the waiting time during which the mortar-containing layer cures and becomes thinner are mentioned in Mandish which discloses a multilayer wall building element (claims 1, 8; column 1, lines 33-38; column 2, lines 26-51; column 3, line 57 - column 4, line 37). A person skilled in the art would therefore consider the inclusion of these features as a routine measure for solving the problem of interest.

***Response to Arguments***

Applicant's arguments filed 8/27/2008 have been fully considered but they are not persuasive. Regarding the applicant's argument:

“Blocken teaches an insulating mortar employable for floor and roof fillings. This mortar is spread on a concrete layer 20. This concrete layer forms a part of the building structure (see, for example, col. 3, line 4, "load-bearing concrete ceiling 20") and is not used to form a block type building stone as currently claimed. Further, Blocken does not teach or suggest building blocks having a concrete layer; in fact, there is no teaching or suggestion in Blocken to produce building blocks having a concrete layer as part of the building blocks themselves.”

The examiner notes that the comment “not used to form a block type building stone as currently claimed” is purely intended use of the structure. It has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (*Ex parte Masham*, 2 USPQ 2d 1647 (1987)). However, the examiner also notes that the claim language is extremely broad in that it states "a block type building stone." Although it has been held that a preamble is denied the effect of a limitation where the claim is drawn to a structure and the portion of the claim following the preamble is a self-contained description of the structure not depending for completeness upon the introductory clause (*Kropa v. Robie*, 88 USPQ 478 (CCPA 1951), the preamble does not distinguish over the Blocken reference

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because the Blocken reference is made from various stone materials, all of which are illustrated in block (which is broadly defined by Webster's as a solid piece) form and are used in building a structure.

Furthermore, the argument states that Blocken does not teach the use of a concrete layer. The applicant argues a few lines above this assertion that it does include a concrete layer which the examiner agrees with (see layer 20 which is concrete).

Regarding the applicant's argument:

“The Applicants further submit that the subject matter in claim 2 is not anticipated by Blocken. Figures 1 and 2 of Blocken do not show the thickness of the concrete layer 20. Applicants submit that the non-linear, intentionally irregular line terminating the sides and the bottom of the inner layer 20 indicates that the thickness of the inner layer 20 is undefined and indefinite. Hence, figures 1 and 2 were not drafted to depict a defined thickness of the inner layer 20 or to define a ratio or comparison of the respective thicknesses of the inner, middle and outer layers. Therefore, the Applicants respectfully submit that Blocken does not enable one skilled in the art to make a thickness comparison of the layers as set forth by the Examiner. Further, by making such a comparison, the Applicants respectfully submit that the Examiner has impermissibly read teachings into Blocken that do not exist. Therefore, the Applicants respectfully submit that claim



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2 is not anticipated by Blocken. Withdrawal of this rejection is respectfully requested. “

The examiner notes that within Figure 1, the concrete layer (20) which is the inner layer is thicker than the outer layer (30). Even with the broken line, which is meant that the layer can extend further which further adds to the thickness, the layer is illustrated as being thicker. The same is the case with the middle layer (24) and the upper layer (30). Figure 1 illustrates clearly that the middle layer has a larger thickness and width (whichever way the width is to be measured).

Regarding the applicant's argument:

“The Applicants further submit that the subject matter in claims 9-10 is not anticipated by Blocken. In Blocken, the lower surface of the inner layer 20 as shown in the figures is not shown to be level. In fact, the lower surface is not shown. Therefore, the Applicants respectfully submit that Blocken does not teach that all of the surfaces within the structure are level. Withdrawal of this rejection is respectfully requested.”

The examiner notes that all surfaces within Figure 1 that have solid, unbroken lines are shown to be level. The examiner also notes that the bottom of layer 20 is, as described in the specification, meant to be placed on a floor or a roof, both of which are understood to be level within the art. The aim of most floors and roofs is to be level in

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order to be easily walked upon, rested upon, and to ensure strength and durability of the above layers. The examiner also notes that layer 20 supports a wall, as per the disclosure. Builders, as well known in the art, typically would build the underlying floor to be level if it is supporting another structure.

Regarding the applicant's argument:

“Regarding claims 3 and 11-12, the Applicants respectfully submit that the Examiner misinterprets the teachings of Blocken. Although the examiner correctly refers to the fact that Blocken never distinctly discloses the exact thickness or length of individual layers, the Applicants submit that such teachings would be irrelevant with respect to the teachings of Blocken because Blocken shows continuous layers. The concrete layer 20 that forms the floor structure may carry a wall (see col. 2, line 35) and at least extends over the complete area of a room. Hence, one skilled in the art would never look to the teachings of Blocken for information regarding prescribed the thicknesses of the layers. Therefore, the Applicants submit that Blocken does not teach a concrete layer 20 having a thickness between 4 and 15 cm and/or an overall length of 0.4 to 2.5 m. Withdrawal of the rejection of claims 3 and 11-12 is respectfully requested.”

The examiner notes that the fact that the surface “carries a wall” has no bearing on the potential size and thickness of the layer. Walls can be of any size and weight. Smaller walls can exist in smaller rooms or if large doorways exist in a room. Depending on the

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size of the structure being built by the invention of Blocken, the size of the block can vary.

Regarding the applicant's argument:

“Regarding claim 12, the Applicants submit that the insulating layer 28 of Blocken is not of strip shape -- to the contrary, the insulating layer in Blocken is continuous. Therefore, the Applicants respectfully submit that there is no teaching or suggestion in Blocken of a strip shape layer (i.e. layer 28).  
Withdrawal of this rejection is respectfully requested.”

The examiner notes that strips can and generally are continuous until the end of the strip. The structure of Blocken is not defined as being infinite within the specification and therefore has an end and can be considered a "strip-shape." Webster's defines strip-shaped as a long slender piece. The length of the prior art certainly is illustrated to be larger than the thickness and therefore would be considered long and slender.

Regarding the applicant's argument:

“Regarding claim 8, the Applicants respectfully submit that Maguire does not teach or suggest any form of layer structure as defined in the claimed invention. To the contrary, Maguire teaches a one piece, one material block having a special three dimensional shape which allows for interlocking structures when constructing retaining walls. Maguire and Blocken present different teaching with

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no overlapping content; therefore, the Applicants submit that there would be no motivation for one skilled in the art to combine the teachings of Maguire and Blocken to arrive at the claimed invention. Furthermore, Blocken's mortar products are flat and not structured as in Maguire and, as such, the combined teachings would do not meet the terms of the claimed invention. Withdrawal of the rejection of claim 12 is respectfully requested."

The examiner notes that Maguire teaches a tongue and groove type connection between blocks or layers when being stacked. The layers of Blocken are illustrated as being stacked in Figure 1. Tongue and groove-type fastening has been known in the art for many years. A modification to the layers of Blocken to implement a tongue and groove-type fastening between layers in order to enhance the strength and stability of the overall structure is obvious to one having ordinary skill in the art.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARK R. WENDELL whose telephone number is (571)270-3245. The examiner can normally be reached on Mon-Fri, 7:30AM-5PM, Alt. Fri off, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on (571) 272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Richard E. Chilcot/  
Supervisory Patent Examiner, Art  
Unit 3635

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/M. R. W./  
Examiner, Art Unit 3635  
November 12, 2008